

U.S. Department of Energy



ORDER

WAPA O 450.1

DATE: 07-27-00

SUBJECT: ENVIRONMENTAL CONSIDERATIONS IN THE PLANNING, DESIGN, CONSTRUCTION, AND MAINTENANCE OF POWER FACILITIES AND ACTIVITIES

1. PURPOSE. This Order establishes policy, assigns responsibilities, and delegates authority to ensure that marketing and rate-setting activities and activities associated with planning, design, construction, operation, and maintenance of power facilities by Western Area Power Administration (Western) comply with the environmental laws and regulations of the United States and State and local jurisdictions.
2. CANCELLATION. WAPA Order 5400.1A, ENVIRONMENTAL CONSIDERATIONS IN THE PLANNING, DESIGN, CONSTRUCTION, AND MAINTENANCE OF POWER FACILITIES AND ACTIVITIES, of 11-10-94, and WAPA Order 5400.2A, ENVIRONMENTAL COMPLIANCE RELATED TO THE OPERATION AND MAINTENANCE OF POWER FACILITIES, of 03-14-94.
3. SCOPE. The provisions of this Order apply to all employees and functions within Western. Development of additional directives is optional.
4. POLICY. Western will conduct its business in an environmentally sound manner, efficiently and effectively complying with the letter, spirit, and intent of applicable environmental statutes, regulations, and standards. Western will use effective planning to eliminate, lessen, or mitigate the environmental impacts of its actions. Western's goal is to enhance the environment through cleanups, preventing pollution, and minimizing waste. Environmental protection is everyone's responsibility.
 - a. Public concerns and Federal, State, tribal, and local agency requirements pertaining to environmental issues will be addressed in Western actions. This will include issues related to planning, design, construction, operation, and maintenance of facilities; power marketing; and managing regulated materials and clean-up actions.
 - b. Western will conduct all activities in compliance with the letter and spirit of the applicable environmental statutes, regulations, and standards. Western is committed to good environmental management of all its programs and at all its facilities. Western will correct existing environmental problems at its facilities

to minimize risks to the environment or public health. Western will anticipate and address potential environmental problems before they pose a threat to the quality of the environment or the public welfare. Efforts to meet environmental obligations will be carried out across all operations and among all functions and programs. All operations and functions across Western will ensure compliance with environmental obligations.

- c. Contractors will share Western's commitment to good environmental management. Western expects its contractors to conduct their operations in an environmentally sound manner that limits the risks to the environment and protects the public health. Western will actively oversee each contractor's activities to assure compliance with this policy.
5. RESPONSIBILITIES. Additional responsibilities are found in Chapter 1 of this Order.
- a. Administrator.
 - (1) Oversees Western's compliance with laws and regulations to protect, restore, and enhance the environment.
 - (2) For Western, appoints an Historic Preservation Officer; National Environmental Policy Act (NEPA) Compliance Officers; Green Acquisition Advocate; Facility Recycling Coordinator; and representatives as appropriate under the Clean Air Act; Clean Water Act; Comprehensive Environmental Response, Compensation, and Liability Act; Emergency Planning and Community Right to Know Act; Federal Insecticide, Fungicide, and Rodenticide Act; Hazardous Material Transportation Act; Resource Conservation and Recovery Act; Superfund Amendments and Reauthorization Act; the Toxic Substance Control Act; and other applicable State and Federal laws, regulations and requirements.
 - (3) Abides by the requirements of DOE Order 451.1A, NATIONAL ENVIRONMENTAL POLICY ACT COMPLIANCE PROGRAM, and as amended, in carrying out Western's NEPA activities.
 - (4) Designates participants to develop and review environmental documents for which Western is a cooperating or consulting agency on actions that have Western-wide implications.
 - (5) Approves and signs records of decision.
 - (6) Ensures training on pertinent environmental laws and regulations is provided and tracked for Western personnel.

- (7) Coordinates and prepares budget submittals to ensure adequate funding is available to implement environmental programs and requirements.
- (8) Coordinates staffing review to ensure adequate staff with required knowledge, skills, and abilities are available to meet the demands of regulatory, DOE, and business-driven requirements.
- (9) Coordinates accounting and reporting to ensure management reports are accurate and provides appropriate data to implement environmental requirements, and report general compliance status.
- (10) Assigns environmental performance requirements for managers reporting to the Administrator.
- (11) Establishes environmental performance objectives and criteria.
- (12) Sets compliance and self-assessment policies, including environmental management appraisal and audit policies and assigns responsibilities through written directives.
- (13) For Western-wide environmental activities, approves and signs memorandums of understanding, programmatic agreements, and other interagency agreements such as Federal facility agreements and compliance agreements with other agencies.
- (14) May direct the Chief Program Officer to convene an incident investigation for the Corporate Services Office (CSO), a Regional Office, or the Colorado River Storage Project (CRSP) Management Center, as needed.

b. Chief Program Officer.

- (1) Reviews directives for implementing environmental regulations and enhancing the environment prior to approval by the Administrator.
- (2) Tracks performance against environmental objectives established by the Administrator.
- (3) Recommends to the Administrator the person to be appointed as the Historic Preservation Officer.
- (4) For CSO environmental activities, approves and signs memorandums of understanding, programmatic agreements, and other interagency agreements, such as Federal facility agreements and compliance agreements with other agencies. Signs memorandums and agreements for Regional and/or CRSP Management Center activities, if requested.

- (5) Ensures the acquisition of easements and the purchase and disposal of real property and other aspects of land acquisition comply with appropriate Federal, State, and local environmental laws and regulations and DOE Orders.
- (6) Ensures the development of self-assessment processes and procedures to track environmental performance.
- (7) Ensures CSO facility designs are coordinated with appropriate environmental staff.
- (8) Coordinates revisions to sections of the engineering, safety program, and power systems maintenance manuals, which provide direction and guidelines for the implementation of environmental responsibilities.
- (9) Appoints, by memorandums, investigation teams for environmental incidents occurring at the CSO, or as requested by the Administrator or a Regional Manager or the CRSP Management Center Manager per the requirements in Chapter 1 of this Order.

c. Chief Administrative Officer.

- (1) Oversees property and facilities management activities in response to environmental laws, regulations, policies, and executive orders.
- (2) Coordinates acquisition activities to ensure that contracts are issued as necessary to support the implementation of environmental requirements.
- (3) Implements required pollution prevention/waste minimization and affirmative procurement as mandated by Federal law, regulation, and/or executive order.
- (4) At the request of an ordering organization, provides provisions in solicitations for environmental audits of contractors prior to award, and ensures that awarded contracts adhere to contractual requirements to comply with environmental laws and regulations.

d. Corporate Communications Manager or designee will serve as Western's Public Participation Program Manager. The Program Manager:

- (1) Serves as a resource for public participation activities and programs at Western.
- (2) Provides advice and assistance to program and project managers in developing, executing, and evaluating plans to inform and consult with Western's publics.

- (3) Reviews public participation plans and public involvement activities in accordance with Western's Public Participation Policy.
- (4) Maintains and updates, as needed, Western's Public Involvement Handbook and other tools to ensure a uniform approach to carrying out public participation activities.

e. Environment Manager, CSO.

- (1) Maintains a list of the pertinent environmental laws, regulations, executive orders, and policies applying to the planning, design, construction, operation, and maintenance of power facilities and marketing and rate-setting activities.
- (2) Coordinates acquisition activities to ensure contracts are issued as necessary to support the implementation of environmental requirements.
- (3) Coordinates accounting and reporting to ensure management reports are accurate and provide appropriate data to implement environmental requirements.
- (4) Serves as the CSO NEPA Compliance Officer.
- (5) Provides guidance, assistance, and support in environmental planning to other CSO organizations, the CRSP Management Center, and Regional Offices to ensure compliance with environmental planning laws and regulations.
- (6) Provides liaison with the DOE Office of the Assistant Secretary for Environment, Safety, and Health, including quality control of NEPA documents, interpretation of regulations, preparation of guidance materials, training, planning, research and analysis, and project management.
- (7) Prepares directives for signature by the Administrator establishing policy and assigning responsibilities. Policy and responsibilities are agreed upon among the CSO Environment Manager, the Regional Offices, and the CRSP Management Center.
- (8) Prepares training materials, coordinates environmental training needs within CSO, and ensures that appropriate training opportunities are identified for Western staff responsible for implementing environmental laws, regulations, and policy.

- (9) Maintains a NEPA Quality Assurance Plan.
- (10) Prepares the Annual Environmental Site Report, which combines numerous DOE reporting requirements.
- (11) Provides quality control procedures so Western may fulfill its responsibilities under Federal, State, and local policies and requirements.
- (12) Provides environmental guidance, assistance, and support to other Western entities to meet program and compliance goals.
- (13) Coordinates self-assessment activities to ensure consistent measurement of regulatory and programmatic compliance.
- (14) Ensures coordinated review and program development between Safety and Environment for regulatory and policy requirements affecting both offices.
- (15) Ensures Western-wide engineering, safety program, power systems maintenance manuals, and other standard operating procedures address environmental requirements.
- (16) Maintains communication Western-wide by providing periodic information on the status of programs, projects, internal and external inspections, and waste minimization/pollution prevention data.
- (17) Appoints, by memorandums, Program Coordinators to manage CSO specific programs, and to interact with Regional and/or CRSP Management Center Program Coordinators.
- (18) Designates a NEPA Project Manager for CSO or Western-wide activities that require an environmental assessment (EA) or environmental impact statement (EIS).

f. General Counsel.

- (1) Provides legal advice to all Western organizations about the level of environmental review required for proposed actions, the permissibility of proposed interim actions, the need for mitigation action plans for proposed actions, and the conformance of proposed actions with environmental laws and regulations.
- (2) Reviews environmental documents, as needed, for legal adequacy and compliance with environmental laws and regulations.

- (3) Provides legal assistance to all Western organizations as needed to ensure compliance with relevant environmental laws and regulations.

g. Regional Managers and the CRSP Management Center Manager.

- (1) Ensure activities comply with environmental requirements.
- (2) Coordinate staffing review to ensure adequate staff with required knowledge, skills, and abilities are available to meet the demands of regulatory, DOE, and business-driven requirements.
- (3) Ensure training on pertinent environmental laws and regulations is provided and tracked for personnel under his/her authority.
- (4) Track performance against environmental objectives established by the Administrator.
- (5) Coordinate and prepare budget submittals to ensure that adequate funding is available to implement environmental programs and requirements.
- (6) Coordinate accounting and reporting to ensure that management reports are accurate and provide appropriate data to implement environmental requirements, and report general compliance status.
- (7) Ensure facilities are constructed, maintained, and operated according to environmental requirements; including those for waste management and protection of natural resources.
- (8) Ensure the requirements of DOE Order 451.1A, National Environmental Policy Act Compliance Program, and as amended, are satisfied in carrying out NEPA activities where authority has been delegated to a Region or the CRSP Management Center.
- (9) Designate participants to develop and review environmental documents where Western is a cooperating or consulting agency for actions that have Regional or CRSP Management Center implications.
- (10) Ensure activities on right-of-way and other maintenance activities adhere to mitigation requirements adopted through agreement with land owners and land managers or as part of the NEPA process and requirements of other environmental regulations.
- (11) Ensure contractors operating and maintaining equipment in Western facilities meet the environmental requirements of their contract and

applicable Federal, State, and local laws and regulations and DOE directives.

- (12) Ensure internal appraisals and audits of regional activities are conducted at a frequency to ensure the effectiveness of the environmental program, and conduct follow-up inspections to verify that issues previously identified have been corrected.
 - (13) Ensure environmental appraisals and contractor activities audits are conducted frequently enough to ensure effectiveness of the environmental program.
 - (14) Ensure waste minimization and pollution prevention awareness programs are developed.
 - (15) Ensure reports on incidents and issues as defined in WAPA Order 5500.1H, Power System Incident Reporting; DOE O 231.1 Change 2, Environment, Safety, and Health Reporting; and DOE O 232.1A, Occurrence Reporting and Processing of Operations Information, are submitted to Western and DOE within the required time periods.
 - (16) Appoint, by memorandums, investigation teams for environmental incidents occurring in the Region or CRSP Management Center, or as requested by the Chief Program Office (CPO) per the requirements in Chapter 1 of this Order.
 - (17) For Regional or CRSP Management Center environmental activities, approve and sign memorandums of understanding, programmatic agreements, and other interagency agreements, such as Federal facility agreements and compliance agreements with other agencies.
- h. Regional Administrative Officers, the CRSP Management Center Manager, and the Sierra Nevada Region Procurement Officer.
- (1) Oversees property and facilities management activities in response to environmental laws, regulations, policies, and executive orders.
 - (2) Coordinate acquisition activities to ensure that contracts are issued as necessary to support the implementation of environmental requirements.
 - (3) Implement required pollution prevention/waste minimization and affirmative procurement as mandated by Federal law, regulation, and/or executive order.
 - (4) At the request of an ordering organization, provide provisions in solicitations for environmental audits of contractors prior to award, and

ensure that awarded contracts adhere to contractual requirements to comply with environmental laws and regulations.

i. Power Marketing Managers and the CRSP Management Center Manager.

- (1) Ensure power marketing activities comply with environmental requirements.
- (2) Ensure proposed rate actions and power marketing plans conform to DOE procedures for NEPA compliance found at 10 Code of Federal Regulations (CFR) 1021.
- (3) Provide all persons authorized to execute power marketing contracts, consistent with WAPA Order 6120.1C, with information concerning required environmental provisions for power marketing contracts.
- (4) Ensure power marketing contracts, drafted for signature by any person, contain provisions requiring customers to comply with applicable environmental laws and regulations.
- (5) Coordinate activities with their Environmental Manager at an early stage in activity planning to ensure environmental considerations are properly addressed.

j. Regional Maintenance Managers.

- (1) Coordinate activities with their Regional Environmental Manager at an early stage in activity planning to ensure environmental considerations are properly addressed.
- (2) Ensure activities comply with environmental requirements.
- (3) Ensure facility designs, specifications, construction, and maintenance procedures comply with environmental requirements.
- (4) Ensure contractors meet environmental requirements.
- (5) Ensure customer-owned equipment installed in Western facilities complies with Western's environmental requirements.
- (6) Ensure waste minimization and pollution prevention awareness programs are implemented.

k. Regional Operations Managers.

- (1) Coordinate activities with their Regional Environmental Manager at an

early stage in activity planning to ensure environmental considerations are properly addressed.

- (2) Ensure activities comply with environmental requirements, including Western's policy on incident reporting.

I. Regional and CRSP Management Center Environmental Managers.

- (1) Develop and implement policies, programs, and procedures to ensure Federal, State and local environmental requirements and DOE and Western policies are identified and incorporated into activities.
- (2) Ensure all activities, including maintenance, construction, marketing, and operations, comply with environmental requirements.
- (3) Advise and assist Western personnel on environmentally related laws, regulations, matters, procedures, document preparation, training, and guidance.
- (4) Serve as the DOE NEPA Compliance Officer for their organization.
- (5) Coordinate NEPA and other applicable environmental laws, regulations, and Orders within their organization.
- (6) Identify and carry out the regulatory and policy requirements defined by DOE to prepare an EA and classes of actions not requiring preparation of an EA or an EIS (10 CFR 1021, 40 CFR 1500, and DOE O 451.1A).
- (7) Review NEPA documents for compliance with the Council on Environmental Quality, DOE regulations, and Western's quality assurance plans.
- (8) Designate a NEPA Project Manager for Regional/CRSP Management Center activities that require an EA or EIS (a NEPA Project Manager may be a Regional, CRSP Management Center, or CSO employee).
- (9) Coordinate and negotiate with regulatory agencies on requirements that pertain to environmental compliance.
- (10) Participate in developing and reviewing environmental documents where Western is a cooperating or consulting agency for actions that have organization-wide implications.
- (11) Serve as the primary liaison for Western on environmental compliance matters in their organization involving Federal, State, and local agencies and the public.

- (12) As needed, initiate the development of memorandums of agreement and programmatic agreements for environmental and for cultural resources.
- (13) Advise management of environmental requirements.
- (14) Ensure facilities, programs, policies, and procedures are audited according to DOE policies and procedures.
- (15) Ensure audits and assessments of contractors and vendors follow DOE policies and procedures.
- (16) Coordinate acquisition activities to ensure contracts are issued as necessary to support the implementation of environmental regulatory and policy requirements.
- (17) Review Western-wide engineering, safety program, power systems maintenance manuals, and other standard operating procedures to ensure environmental requirements are addressed and coordinates input with the CSO Environmental Manager.
- (18) Coordinate accounting and reporting to ensure management reports are accurate and provide appropriate data to implement environmental requirements.
- (19) Ensure the monthly environmental activities report is delivered to CSO and all other Western environmental offices by the seventh working day of each month.
- (20) Appoint, by memorandums, Program Coordinators from their staff to manage organization-specific programs and to interface with other Regional, CRSP Management Center, and/or CSO Program Coordinators.

m. NEPA Project Managers.

- (1) Serve as a DOE Document Manager.
- (2) Maintain the administrative record for NEPA processes, including records required by related legislation; e.g., Section 7 of the Endangered Species Act and Section 106 of the National Historic Preservation Act.
- (3) Conduct activities as defined by DOE Order 451.1A, NATIONAL ENVIRONMENTAL POLICY ACT COMPLIANCE PROGRAM, and as amended, to prepare EAs and EISs.

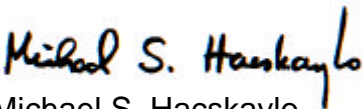
- (4) Serve as the Contracting Officer's Representative or Task Order Manager for environmental technical services needed for EAs, EISs, and integral element reviews.
- (5) Review public participation plans to ensure they comply with statutory and other obligations.
- (6) Provide advice and assistance to Western personnel on public involvement activities, procedures, document preparation, training, and guidance.
- (7) Use the principles and techniques of project management to manage the document preparation process, including reviewing internal drafts for technical adequacy, controlling cost, and maintaining a schedule.
- (8) Arrange for Office of General Counsel review of preliminary documents.
- (9) Coordinate EISs and EAs, with the DOE Office of NEPA Policy and Assistance, and coordinate EISs with the Environmental Protection Agency.
- (10) Monitor construction and maintenance activities to ensure compliance with mitigation requirements identified in NEPA documents.

n. Historic Preservation Officer.

- (1) Provides advice and assistance to Western personnel on cultural resources related matters, including document preparation, training, and guidance.
- (2) Reviews all environmental documents for compliance with appropriate cultural resource regulations.
- (3) Participates with the Regional and/or CRSP Management Center Environmental Managers in negotiating memorandums of agreement and programmatic agreements regarding treatment of cultural resources.
- (4) Coordinates consultations with State Historic Preservation Officers and Advisory Council for Historic Preservation regarding effect and eligibility determinations for National Register of Historic Places.

6. REDELEGATIONS. Appropriate redelegations may be made. Redelegations shall be issued as written directives. A manager who redelegates authority does not divest the power to exercise that authority, nor does the redelegation relieve that official of the responsibility for action taken pursuant to the delegation.

7. CONTACT. Questions concerning this Order should be addressed to the CSO Environment Manager.


Michael S. Hacskeylo
Administrator

Chapter 1

ENVIRONMENTAL INCIDENT INVESTIGATION AND REPORTING REQUIREMENTS

Incident investigations are conducted for those situations where operations are disrupted, environmental damage occurs, regulatory violations occur, or external entities are affected. Investigations do not include enforcement proceedings or liability determinations. Investigations are implemented by convening an incident investigation team to gather facts, analyze causes, develop recommendations, and compile a report which can be used by management to develop systems and procedures to prevent similar situations from occurring in the future.

1. **OBJECTIVE.** The primary goal of Environmental Incident Investigation and Reporting is to prevent similar occurrences and improve the environmental compliance of all operations.
2. **RESPONSIBILITIES.**
 - a. **Chief Program Officer.**
 - (1) Appoints Environmental Investigation Teams of three to five Western employees for CSO incidents, or for Regional incidents if the appointment is requested by the Administrator or a Regional Manager. The makeup of the team must include the following:
 - (a) A DOE-trained accident/incident investigator.
 - (b) A Western manager or team lead.
 - (c) A union representative as mandated by contract.
 - (2) Distributes submitted investigation reports.
 - b. **Regional Managers and CRSP Management Center Manager.**
 - (1) Appoint Environmental Investigation Teams of three to five Western employees for Regional incidents. The makeup of the team must include the following:
 - (a) A DOE-trained accident/incident investigator.
 - (b) A Western manager or team lead.
 - (c) A union representative as mandated by contract.
 - (2) Distribute submitted investigation reports.
 - c. **CSO Environment Manager.** Assigns an environmental staff employee to be the liaison for each Environmental Investigation Team.

3. PROCEDURES FOR FORMAL INCIDENT INVESTIGATIONS.

- a. Criteria for Conducting Incident Investigations. Incident investigations may be warranted when the following situations occur:
 - (1) An environmental incident, including but not limited to, spills of regulated material, and/or
 - (2) A notification of violation by a regulatory agency, and/or
 - (3) An environmental incident where damage to protected species, threatened and endangered species, cultural resources occurs, and/or
 - (4) An environmental incident where damage to public, Federal, State, local, or tribal property occurs, and/or:
 - (5) The environmental incident involves and brings the scrutiny of outside, non-Western people, organizations, entities, and regulators.
- b. Incident Investigation Steps.
 - (1) Appointment of Investigation Team. The CPO, the CRSP Management Center Manager, or the Regional Manager appoints in writing the investigation team. The team will be made up of individuals meeting the criteria of paragraph 2a(1) of this Chapter. The scope, specified completion date, and any other instruction will be in writing from the appointing official. The team members will be independent of the direct line management chain responsible for day-to-day operation or oversight of the facility, function, or activity involved in the incident. To maintain the integrity of the investigation, the team members will report only to the appointing official.
 - (2) Initial Meeting. The investigation team meets with the appointing official regarding the objective, scope, and duration of the investigation.
 - (3) Fact Finding. The fact-finding process includes gathering documents, interviewing people who may have knowledge related to the situation (internal and external to Western), visiting the incident site(s) and any other locations that may provide factual information.
 - (4) Analysis. The analysis process determines the direct, contributing, and root causes of what happened and why it happened. Analytical techniques including events and causal factors charting and analysis, barrier analysis, change analysis, and root cause analysis may be used during the analysis process. The results of the analysis process is

intended to help line management prevent recurrence of incidents by identifying all of an incident's causal factors.

- (5) Reporting. The report may be started during the fact-finding process. The report format shall include the following, at a minimum:
- (a) Introduction. Provides a general overview of the investigation, including appointing official's name, team member names, purpose of the investigation, dates of work, etc.
 - (b) Authority for Investigation. Specifies those Western and DOE Policies, Orders, Manuals, and/or Guides that authorize the investigation.
 - (c) Executive Summary. Gives a beginning-to-end statement of the incident, up to the point of investigation.
 - (d) Summary of Facts. By date, all actions, documents, statements, issues, etc., discovered during fact-finding appropriate to the incident are listed and briefly summarized.
 - (e) Findings and Analysis. Facts are analyzed within the scope of factors including regulatory, management control, and systems implementation, which may be contributory to the incident. Factors may specifically include regulatory, training, decision and direction, responsibility, supervision/controls/management, inspection, etc.
 - (f) Causative Factors. Causes of the incident are specifically stated. Causes may be broken down into the areas of direct cause and root cause. Direct cause would be the direct, on-scene reason for the incident. The root cause would be the result of analysis, where, if certain steps were taken early in the project process, the incident would not have occurred.
 - (g) Recommendations. Recommendations are made which, if taken, would prevent such an incident from happening again. The recommendations must be derived from the facts, findings analysis, and causative factors. They must be reasonable and be able to be implemented within the scope of existing organizational directives, policies and guidelines.
 - (h) Interview Contacts. All those interviewed are listed by name and title.
 - (i) List of Attachments. All photos, documents, etc., attached to the report are listed.

- (j) Signatures. The investigation team lead and team members sign and date the report, and if appropriate, include a minority report section should any team member wish to offer an opinion different from the views in the report.
- (k) Report Review. If thought necessary by the team, a draft report, or portions of the report, may be provided to all those interviewed to confirm facts. If provided, the draft report shall be distributed to the interviewees by memorandum with a specified deadline for comments.
- (l) Report Submission. The team shall present the report to the appointing official either personally or by memorandum.
- (m) Report Distribution. The report will be distributed at the direction of the appointing official, depending upon the scope of the investigation.